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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,068	07/15/2003	Kai H. Chang	Chang 6-17-28	7129

7590

06/06/2006

Fitel USA Corp.
Room 2H02
2000 Northeast Expressway
Norcross, GA 30071

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,068	Applicant(s) CHANG ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/7/2006 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "Si defects" is indefinite as to its meaning. First of all, examiner could find no definition of this term. Second, from [0042] applicant discloses that the treatment does not reduce the number of defects, rather it seems to convert them to less harmful defects. Also, [0012] indicates that there are other Si defects beyond "Si-O • defects" and "Si • defects" – but there is no indication as to what those other defects might be. For example it is unclear whether SiD is an Si defect – which would mean it is unclear whether practicing applicant's invention to merely convert Si defects into SiD

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defects would infringe on the claims because it does not reduce "the amount" rather it merely changes the form of the defects.

The term "room temperature" is indefinite as to its meaning. As per the everything2.com website reference (see PTO-892) , "room temperature" can be from -10 C to 50 C. Physicists go by the narrow range of 21-23 C. One of ordinary skill would not be able to ascertain what temperatures read on the claims and which would not. Applicants give no indication or examples as to what temperatures do or do not read on "room temperature".

See Allen Eng'g Corp. V. Bartell Indus. Inc. 299 F.3d 1336, 1348, 63 USPQ2d 1769, 1775 (Fed. Cir. 2002) (quoting Personalized Media Communications, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed. Cir. 1998)) ("In determining whether the claim is sufficiently definite, we must analyze whether "one skilled in the art would understand the bounds of the claim when read in light of the specification.") See also, Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375, 60 USPQ2d 1272, 1276 (Fed. Cir. 2001) (citation omitted) (patent claims must be "sufficiently precise to permit a potential competitor to determine whether or not he is infringing").

More importantly, since Lemaire 5478371 teaches 50 C treatment – it is presumed that applicant may dispute whether it reads on "room temperature". This rejection will serve to maintain compact prosecution on this issue – especially in the event of an appeal.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 3 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could find no support for the newly claimed dual exposure steps having the claimed pressures – either explicit or implicit. This is deemed to be a prima facie showing on failure to comply with the requirement. The burden is now on Applicant to show the requirement is complied with, or to amend the claims so that they comply. Whereas the originally filed claims shows that Applicant had possession of exposing to “at atmosphere containing deuterium” alone with a “further” exposure (claim 2) to a “deuterium atmosphere”, there is no support for having both of them in the 0.01-0.05 range. There is only support for one of them being in the range – it is presumed that one of the two exposures takes place at a substantially higher pressure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, and 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkins 5287427 or Lemaire 5478371.

Although Atkins and Lemaire do not explicitly teach the “forming...”, “dehydrating...”, “consolidating...” and “drawing...” steps, such are implicit.

From MPEP 2144.01 Implicit Disclosure:

“[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

See also, *In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir 1985).

It is implicit that Atkins and Lemaire are referring to conventional fibers, otherwise the references would have indicated otherwise. As pointed out by applicant at [0004] and [0005] such steps are conventional steps for making optical fibers. It is well understood that patents routinely don’t discuss conventional aspects, rather they focus on what is newly invented. One of ordinary skill reading either references would immediately infer the patents are directed to conventionally made fiber.

The exposing step is disclosed in Atkins at col. 6, lines 54-60 and at Lemaire at col. 2, lines 55-61 and col. 4, line 18. Each reference teaches using “H₂”. Naturally occurring hydrogen has an inherent concentration of deuterium of 0.015%: Examiner takes Official notice of this fact. Thus Atkins’s 208 atmospheres has $208 \times 0.00015 = 0.0312$ atmospheres as a partial pressure of deuterium-containing molecules. Lemaire

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discloses a hydrogen pressure that would have a partial pressure of 0.066 atmospheres of deuterium-containing molecules. It is deemed that 0.066 is "between approximately 0.01 and 0.05 atmospheres". Examiner is considering the "approximately" to convey to the 0.05 value. If applicant intended the claim to be interpreted as "between approximately 0.01 and exactly 0.05", then the claim should use that language, or "between 0.05 and approximately 0.01" or some other language.

Examiner notes that [0042] (and elsewhere) in the present application, applicant refers to deuterium atoms. Examiner could find no mention or description of the specification of any deuterium molecules. Therefore it is deemed that the broadest reasonable interpretation of "an atmosphere containing deuterium...at a partial pressure..." includes a partial pressure of any species "containing deuterium". In other words: the prior art inherently has HD molecules in the required partial pressure. It would be improper for the Office to interpret the claim to be limited to D₂.

Claims 4-8 are also immediately inferred from the references.

Claim 3: from [0012] applicant indicates that two types of defects are removed to form SiOD or SiD. Thus is presumed that applicant considers these are not defects. Thus it is deemed that SiOH and SiH are not defects. It is deemed inherent that substituting one isotope for another (hydrogen/protium for deuterium) would cause substantially the identical reaction: elimination of Si defects.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins 5287427 or Lemaire 5478371.

As discussed above Atkins and Lemaire disclose the invention. They do not explicitly (but do implicitly, see above) disclose “forming...”, “dehydrating...”, “consolidating...” and “drawing...”. These features steps are the conventional mode for making optical fiber (Applicant admits this in the “Description of the Related Art” section starting at [0003]). It would have been obvious to expect that Atkins and Lemaire made the fibers using the conventional techniques, because Atkins and Lemaire does not disclose how the fibers are made, and thus one would expect to use conventional techniques. It is conventional to omit from specification that which is known to be old.

Alternatively it would have been obvious to perform the Atkins or Lemaire invention by using a conventionally-made fiber , or by a conventional fiber making process, because of they are more readily available, and/or because any of their well-known advantages.

Although claims 2 and 10 are not rejected over prior art, they are not considered allowable as per the above rejections.

Response to Arguments

Applicant's arguments filed April 5, 2006 have been fully considered but they are not persuasive.

IT is argued the new claim limitations are disclosed at [0013] and [0014]. Those paragraphs do provide support for claim one, but not for claims 2 and 10. Those paragraphs teach two treatments in the alternative; they do not teach method that combines both of those exposures, i.e. the exposure step which comprises a further exposing.

As to the question of diligence: examiner has not been able to establish whether all the work performed (including the sale of the business unit) by Attorney Harman should have been also in chronological order. The affidavit only indicates that the patent prosecutions were taken up chronologically. Regardless, the issue is moot in light of the new grounds of rejection.

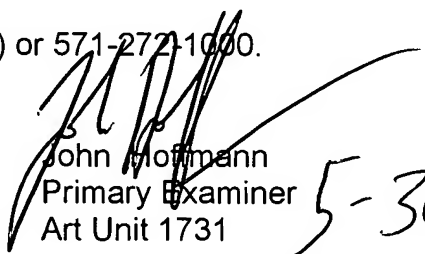
As to Lemaire, it is argued that 14-11000 psi is well outside the claimed partial pressures. This is true, but the claim does not preclude those pressures. Rather the claims only require that there is a partial pressure that comprises deuterium. The claims are comprising in nature and thus are open to having other partial pressures of other gasses of any other pressure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John Hoffmann
Primary Examiner
Art Unit 1731

5-30-06

jmh